



1600

1637

## RAW SEQUENCE LISTING

DATE: 06/02/2002

PATENT APPLICATION: US/09/631,613

TIME: 17:23:11

Input Set : A:\pto.txt

Output Set: N:\CRF3\05312002\I631613.raw

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## SEQUENCE LISTING

3 (1) GENERAL INFORMATION:

5 (i) APPLICANT: HOGREFE, Holly

7 (ii) TITLE OF INVENTION: Polymerase Enhancing Factor (PEF) Extracts, PEF

8 Protein Complexes, Isolated PEF Proteins,

9 and Methods for Purifying and Identifying Same

11 (iii) NUMBER OF SEQUENCES: 61

13 (iv) CORRESPONDENCE ADDRESS:

14 (A) ADDRESSEE: Finnegan, Henderson, Farabow, Garrett, & Dunner, L.L.P.

15 (B) STREET: 1300 I Street, N.W.

16 (C) CITY: Washington

17 (D) STATE: D.C.

18 (F) ZIP: 20005-3315

20 (v) COMPUTER READABLE FORM:

21 (A) MEDIUM TYPE: Floppy disk

C--> 22 (B) COMPUTER:

23 (C) OPERATING SYSTEM: PC-DOS/MS-DOS

24 (D) SOFTWARE: PatentIn Realease #1.0, Version #1.25

26 (vi) CURRENT APPLICATION DATA:

C--> 27 (A) APPLICATION NUMBER: US/09/631,613

C--> 28 (B) FILING DATE: 04-Aug-2000

34 (C) CLASSIFICATION:

C--> 31 (vii) PRIOR APPLICATION DATA:

32 (A) APPLICATION NUMBER: US 08/822,774

33 (B) FILING DATE: 21-MAR-1997

36 (viii) ATTORNEY/AGENT INFORMATION:

37 (A) NAME: BARKER, M. Paul

38 (B) REGISTRATION NUMBER: 32,013

39 (C) REFERENCE/DOCKET NUMBER: 4121.0116-07

41 (ix) TELECOMMUNICATION INFORMATION:

42 (A) TELEPHONE: (650) 849-6613

43 (B) TELEFAX: (650) 849-6666

45 (2) INFORMATION FOR SEQ ID NO: 1:

47 (i) SEQUENCE CHARACTERISTICS:

48 (A) LENGTH: 15 amino acids

49 (B) TYPE: amino acid

50 (C) STRANDEDNESS: unknown

51 (D) TOPOLOGY: unknown

53 (ii) MOLECULE TYPE: peptide

55 (iii) HYPOTHETICAL: NO

57 (iv) ANTI-SENSE: NO

C--> 59 (v) FRAGMENT TYPE: N-terminal

62 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1:

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W--> 64      Xaa Xaa Leu His His Val Lys Leu Ile Tyr Ala Thr Xaa Xaa Xaa
65          1              5              10              15
68 (2) INFORMATION FOR SEQ ID NO: 2:
69      (i) SEQUENCE CHARACTERISTICS:
70          (A) LENGTH: 15 amino acids
71          (B) TYPE: amino acid
72          (D) TOPOLOGY: unknown
73      (ii) MOLECULE TYPE: peptide
74      (iii) HYPOTHETICAL: NO
75      (iv) ANTI-SENSE: NO
C--> 81      (v) FRAGMENT TYPE: N-terminal
82      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2:
W--> 86      Xaa Xaa Xaa Pro Asp Trp Xaa Xaa Arg Xaa Glu Xaa Leu Xaa Xaa
87          1              5              10              15
90 (2) INFORMATION FOR SEQ ID NO: 3:
91      (i) SEQUENCE CHARACTERISTICS:
92          (A) LENGTH: 35 amino acids
93          (B) TYPE: amino acid
94          (D) TOPOLOGY: unknown
95      (ii) MOLECULE TYPE: peptide
96      (iii) HYPOTHETICAL: NO
97      (iv) ANTI-SENSE: NO
C--> 103      (v) FRAGMENT TYPE: N-terminal
104      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3:
W--> 108      Xaa Leu Leu His His Val Lys Leu Ile Tyr Ala Thr Lys Xaa Arg Xaa
109          1              5              10              15
W--> 111      Leu Val Gly Lys Xaa Ile Val Leu Ala Ile Pro Gly Xaa Xaa Ala Xaa
112          20              25              30
W--> 114      Xaa Xaa Xaa
115          35
118 (2) INFORMATION FOR SEQ ID NO: 4:
119      (i) SEQUENCE CHARACTERISTICS:
120          (A) LENGTH: 18 amino acids
121          (B) TYPE: amino acid
122          (D) TOPOLOGY: unknown
123      (ii) MOLECULE TYPE: peptide
124      (iii) HYPOTHETICAL: NO
125      (iv) ANTI-SENSE: NO
C--> 131      (v) FRAGMENT TYPE: N-terminal
132      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 4:
W--> 136      Xaa Xaa Xaa Pro Asp Trp Xaa Xaa Arg Xaa Glu Xaa Leu Xaa Glu Xaa
137          1              5              10              15
W--> 139      Xaa Xaa
142 (2) INFORMATION FOR SEQ ID NO: 5:
143      (i) SEQUENCE CHARACTERISTICS:
144          (A) LENGTH: 17 amino acids
145          (B) TYPE: amino acid
146          (D) TOPOLOGY: unknown
147      (ii) MOLECULE TYPE: peptide
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151      (iii) HYPOTHETICAL: NO
153      (iv) ANTI-SENSE: NO
C--> 155      (v) FRAGMENT TYPE: internal
158      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 5:
W--> 160      Xaa Tyr Asp Ala Val Ile Met Ala Ala Val Val Asp Phe Arg Pro
161          1             5             10             15
163      Lys
166 (2) INFORMATION FOR SEQ ID NO: 6:
168      (i) SEQUENCE CHARACTERISTICS:
169          (A) LENGTH: 24 amino acids
170          (B) TYPE: amino acid
171          (D) TOPOLOGY: unknown
173      (ii) MOLECULE TYPE: peptide
175      (iii) HYPOTHETICAL: NO
177      (iv) ANTI-SENSE: NO
C--> 179      (v) FRAGMENT TYPE: internal
182      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 6:
184      Ala Asp Leu Val Val Gly Asn Thr Leu Glu Ala Phe Gly Ser Glu Glu
185          1             5             10             15
187      Asn Gln Val Val Leu Ile Gly Arg
188          20
191 (2) INFORMATION FOR SEQ ID NO: 7:
193      (i) SEQUENCE CHARACTERISTICS:
194          (A) LENGTH: 17 amino acids
195          (B) TYPE: amino acid
196          (D) TOPOLOGY: unknown
198      (ii) MOLECULE TYPE: peptide
200      (iii) HYPOTHETICAL: NO
202      (iv) ANTI-SENSE: NO
C--> 204      (v) FRAGMENT TYPE: N-terminal
207      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 7:
W--> 209      Gly Ala Met Leu His His Val Lys Leu Ile Tyr Ala Xaa Lys Leu Arg
210          1             5             10             15
212      Lys
215 (2) INFORMATION FOR SEQ ID NO: 8:
217      (i) SEQUENCE CHARACTERISTICS:
218          (A) LENGTH: 18 amino acids
219          (B) TYPE: amino acid
220          (D) TOPOLOGY: unknown
222      (ii) MOLECULE TYPE: peptide
224      (iii) HYPOTHETICAL: NO
226      (iv) ANTI-SENSE: NO
C--> 228      (v) FRAGMENT TYPE: N-terminal
231      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 8:
W--> 233      Gly Ala Met Leu His His Val Lys Leu Ile Tyr Ala Thr Lys Xaa Xaa
234          1             5             10             15
236      Arg Lys
238 (2) INFORMATION FOR SEQ ID NO: 9:
240      (i) SEQUENCE CHARACTERISTICS:

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241      (A) LENGTH: 13 amino acids
242      (B) TYPE: amino acid
243      (D) TOPOLOGY: unknown
245      (ii) MOLECULE TYPE: peptide
247      (iii) HYPOTHETICAL: NO
249      (iv) ANTI-SENSE: NO
C--> 251      (v) FRAGMENT TYPE: N-terminal
254      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 9:
256      Met Leu His His Val Lys Leu Ile Tyr Ala Thr Lys Leu
257      1          5          10
260 (2) INFORMATION FOR SEQ ID NO: 10:
262      (i) SEQUENCE CHARACTERISTICS:
263          (A) LENGTH: 16 amino acids
264          (B) TYPE: amino acid
265          (D) TOPOLOGY: unknown
267      (ii) MOLECULE TYPE: peptide
269      (iii) HYPOTHETICAL: NO
271      (iv) ANTI-SENSE: NO
C--> 273      (v) FRAGMENT TYPE: N-terminal
276      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 10:
W--> 278      Gly Xaa Xaa Xaa Pro Asp Trp Xaa Xaa Lys Phe Arg Lys Glu Glu Ser
279      1          5          10          15
282 (2) INFORMATION FOR SEQ ID NO: 11:
284      (i) SEQUENCE CHARACTERISTICS:
285          (A) LENGTH: 17 amino acids
286          (B) TYPE: amino acid
287          (D) TOPOLOGY: unknown
289      (ii) MOLECULE TYPE: peptide
291      (iii) HYPOTHETICAL: NO
293      (iv) ANTI-SENSE: NO
C--> 295      (v) FRAGMENT TYPE: N-terminal
298      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 11:
300      Gly Ala Ile Leu Leu Pro Asp Trp Lys Ile Arg Lys Glu Ile Leu Ile
301      1          5          10          15
303      Glu
306 (2) INFORMATION FOR SEQ ID NO: 12:
308      (i) SEQUENCE CHARACTERISTICS:
309          (A) LENGTH: 16 amino acids
310          (B) TYPE: amino acid
311          (D) TOPOLOGY: unknown
313      (ii) MOLECULE TYPE: peptide
315      (iii) HYPOTHETICAL: NO
317      (iv) ANTI-SENSE: NO
C--> 319      (v) FRAGMENT TYPE: N-terminal
322      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 12:
W--> 324      Xaa Met His His Val Ile Lys Leu Xaa Tyr Ala Thr Xaa Ser Arg Lys
325      1          5          10          15
328 (2) INFORMATION FOR SEQ ID NO: 13:
330      (i) SEQUENCE CHARACTERISTICS:

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331      (A) LENGTH: 18 amino acids
332      (B) TYPE: amino acid
333      (D) TOPOLOGY: unknown
335      (ii) MOLECULE TYPE: peptide
337      (iii) HYPOTHETICAL: NO
339      (iv) ANTI-SENSE: NO
C--> 341      (v) FRAGMENT TYPE: N-terminal
344      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 13:
346      Met Leu Tyr Leu Val Arg Pro Asp Trp Lys Arg Arg Lys Glu Ile Leu
347      1             5             10             15
349      Ile Glu
352 (2) INFORMATION FOR SEQ ID NO: 14:
354      (i) SEQUENCE CHARACTERISTICS:
355          (A) LENGTH: 23 base pairs
356          (B) TYPE: nucleic acid
357          (C) STRANDEDNESS: single
358          (D) TOPOLOGY: unknown
360      (ii) MOLECULE TYPE: DNA (genomic)
362      (iii) HYPOTHETICAL: NO
364      (iv) ANTI-SENSE: NO
367      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 14:
369      CAYCAYGAHA ARYTHATTTA CGC
372 (2) INFORMATION FOR SEQ ID NO: 15:
374      (i) SEQUENCE CHARACTERISTICS:
375          (A) LENGTH: 23 base pairs
376          (B) TYPE: nucleic acid
377          (C) STRANDEDNESS: single
378          (D) TOPOLOGY: unknown
380      (ii) MOLECULE TYPE: DNA (genomic)
382      (iii) HYPOTHETICAL: NO
384      (iv) ANTI-SENSE: NO
387      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 15:
389      GCCATDATNA CDGCRTCGTA TTT
392 (2) INFORMATION FOR SEQ ID NO: 16:
394      (i) SEQUENCE CHARACTERISTICS:
395          (A) LENGTH: 23 base pairs
396          (B) TYPE: nucleic acid
397          (C) STRANDEDNESS: single
398          (D) TOPOLOGY: unknown
400      (ii) MOLECULE TYPE: DNA (genomic)
402      (iii) HYPOTHETICAL: NO
404      (iv) ANTI-SENSE: NO
407      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 16:
409      CAYCAYGAHA ARYTHATATA CGC
412 (2) INFORMATION FOR SEQ ID NO: 17:
414      (i) SEQUENCE CHARACTERISTICS:
415          (A) LENGTH: 20 base pairs
416          (B) TYPE: nucleic acid
417          (C) STRANDEDNESS: single

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